Internal Letter



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No.

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TO

Plame, Organization, Internal Address)

- G. H. Setlock
- Environmental Management

. Bldg.T452B

FROM

(Name, Organization, Internal Address, Phone)

- F. P. Lawton
- Environmental Management
- Bldg.T452B

7079

SUBJECT. RELOCATION OF WASTEWATER SPRAY FIELD

Attached is a brief discussion of two alternative sprayfield locations for wastewaters. The two proposed alternatives represent the "best" available locations based on a quick analysis that reorganized topographic and political constraints. Both alternatives are less than ideal.

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Rick Lawton Environmental Management

cc:

N. M. Daugherty

G. L. Potter



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ADMIN REDCRO

## ALTERNATIVES TO PROPOSED SPRAYFIELD SITE

The new spray field for irrigating treated sanitary wastewater has been proposed for an area north and west of the landfill. Approximately 80 million gallons of water would be applied to a 30 acre site. Environmental Management has recommended against placing the new spray field at that location pending a groundwater modeling study. Concerns include groundwater impacts and proximity to irrigation and/or water transfer ditches owned by the City of Broomfield; the likelihood that the large amount of water will saturate the landfill, disturbance of a RCRA closure site; and the potential to saturate the new proposed landfill site.

Proposed Alternative Area A (see map) is located in the southwest buffer zone. It is an area of approximately 100 acres. It is bounded by steep slopes on the north and east; the RFP boundary to the west; and a drainage that flows into the Smart Ditch to the south. Problems with the area include distance from the water source (Pond B-3) and the need to engineer for no runoff/overland flow to the Smart Ditch drainage or Woman Creek. There is no room for expansion beyond 100 acres.

Proposed Area B is located west of the plant in the area of the west spray field RCRA closure site. It is a large site, greater than 100 acres, and was used as a sprayfield for wastewater before. It is closer to the water source than site A. Engineering problems would include keeping overland flow from the McKay Ditch. It is not expected that the current hazardous material investigations of the site will find contamination in the area. The area is expected to be released for unlimited use in 1988-1989 timeframe.

Other possible sites excluded include:

 Wind Site - this would place a RFP facility in a drainage that has been unaffected to this date (Rock Creek). This drains NE into Boulder County and is used as a drinking water supply. It is strongly recommended that this drainage be avoided.

- Area to NE of present sprayfield drainage would go into Great Western Reservoir. City of Broomfield would not accept this easily. This might also be visible from Indiana Street.
- 3. Most other areas have slopes that are too steep and surface flows downhill would be excessive, limiting evaporation and/or infiltration.

It should be noted that none of the available sites are without some serious problems. Once all the factors are evaluated for site placement, including economic factors, evaporation towers or other structures should be investigated as possible solutions to the water problem.

